A. E. Roberts,

School Desk.

No. 107,724. Patented Sep. 27, 1870.

Fig 1.

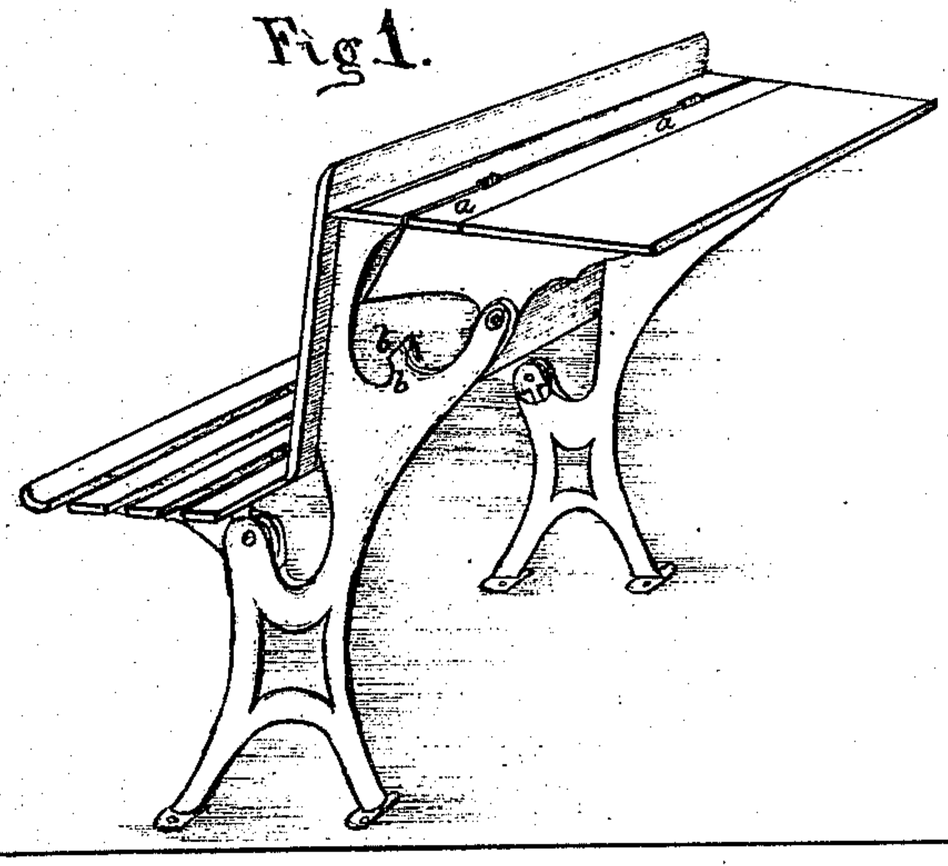


Fig. 2.

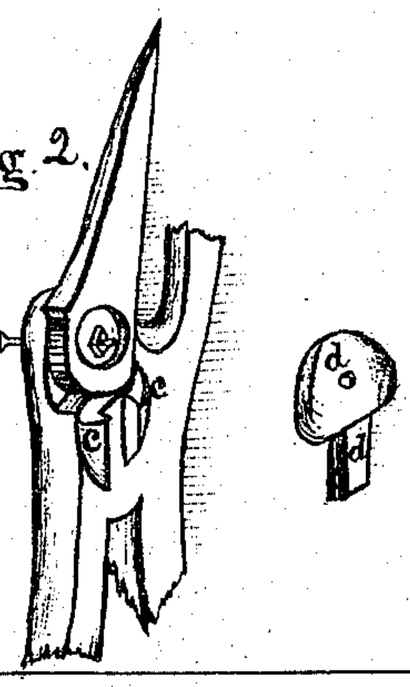
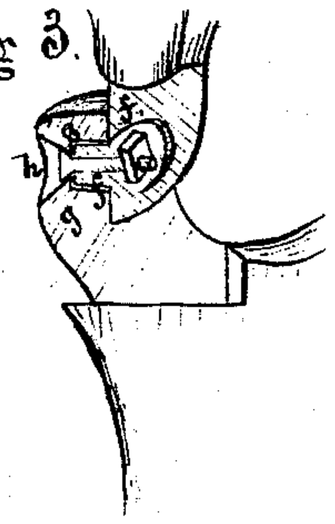


Fig 3.



Witnesses.

Corydon C. Fuller

Albert W. C. Wacks

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ALBERT E. ROBERTS, OF DES MOINES, IOWA.

Letters Patent No. 107,724, dated September 27, 1870.

IMPROVEMENT IN HINGES FOR SCHOOL-DESKS.

The Schedule referred to in these Letters Patent and making part of the same

I, ALBERT E. ROBERTS, of Des Moines, in the county of Polk and State of Iowa, have invented certain Improvements in the Construction of my School-Desk, (patents No. 93,307 and No. 98,801,) of which the following is a specification.

My invention is an improvement of my school-desk patented August 17, 1869, and January 11, 1870, and is designed to strengthen the hinge-joints used in suspending the seat and the revolving book-box and desk, and to provide a means of regulating the friction of the joints.

It consists of a projection, on the side of the joint, in the form of a catch, and a movable cover to fit in the catch, in such a manner that the cover will receive, conceal, and protect the end of the screw-bolt.

Figure 1 is a perspective view of my school-desk, showing the top of the desk divided into three parts or sections.

a a is the center section, and is permanently hinged, as represented. When in its place, as represented in the drawing, it makes the top of the desk complete, and holds the suspended or pivoted part of the desk, together with the book-box, securely in position ready for use.

By turning the hinged center section *a a* upward, it frees the book-box and suspended desk, so that they may be readily moved and folded forward as desired.

b b is a projection in the frame, forming a rest for the book-box, and also a guard to prevent the book-box from striking the back of the seat.

Figure 2 is a perspective view of my hinge, used to support the seat of my school-desk.

c c is a projection, in the form of a catch or socket, joined to the frame and hinge. This projection or socket is cast solid with the frame, and made a part thereof.

d d is a movable cover, made of cast metal, and has an end shaped to fit the socket *c c*. When in its place in the socket, it is a complete cover, hiding the bolt and nut of the hinge. It is also provided with a female screw-thread, correspondidg with the male thread of the bolt. By allowing the bolt to enter this cover, I provide a way of tightening the hinge, whenever desired, by simply turning the bolt, and screwing it into the movable cover *d d*. This cover, connected with the bolt and the socket-hinge, forms a joint that is perfectly firm, and prevents any lateral movement or jarring of the seat, and may be applied with the same effect and for the same purpose on all hinge-joints.

Figure 3 is a half section of my hinge, used for suspending the combined book-box and desk.

f f is the male part of the hinge.

g g is the female part of the same hinge.

h is a conical-shaped cavity in the frame or hinge, by the use of which I avoid the drilling of a hole for the bolt, and form a cavity to receive the head of the bolt.

These same improvements are applied and used in my hinges supporting the seat of my desk, but are not shown in the drawing in fig. 2.

I am aware that there is nothing new in the construction of this socket-hinge, excepting in the manner of using it, and applying it to form a joint or hinge in the frame of my school-desk.

Claim.

I claim as my invention—

The addition of the projection and socket *c c* to the frame and hinge, together with the movable cover *d d*, substantially as described, and for the purposes specified.

ALBERT E. ROBERTS.

Witnesses:

CORYDON E. FULLER,
ALBERT W. C. WEEKS.